Center for BioMolecular Modeling

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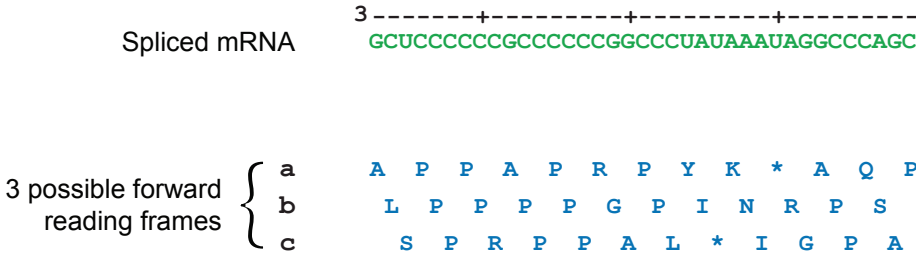
A CBM Paper Bioinformatics Activity

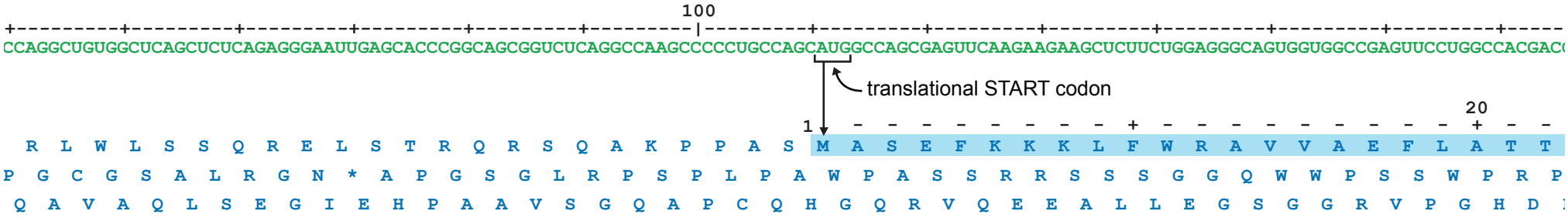
Human Aquaporin mRNA

Isoform: AQP1
Based on NCBI Reference Sequence NM_198098.2

Introduction

Cell membranes provide an important barrier to the flow of water into and out of the cell. While small amounts of water can leak across lipid bilayers, the rapid, selective transfer of water requires transmembrane water channels known as aquaporins. The first aquaporin, AQP1, was discovered in 1992 by Peter Agre, MD, Johns Hopkins University, who was awarded the Nobel Prize for Chemistry in 2003.



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60
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S L S S S A S V L P W A S N T R W G T T R R R S R T T * R C R W P S G * A S P R W R R V W
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80
100
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A T S A A P T S T R L S H W G C C S A A R S A S S V P S C T S S P S A W G P S S P P P S S
P H Q R R P P Q P G C H T G A A A Q L P D Q H L P C P H V H H R P V R G G H R R R H R H P L
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140
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Q A S P P P * L G T R L A A M T W L M V * T R A R A W A S R S S G P S S W C Y A C W L L P T
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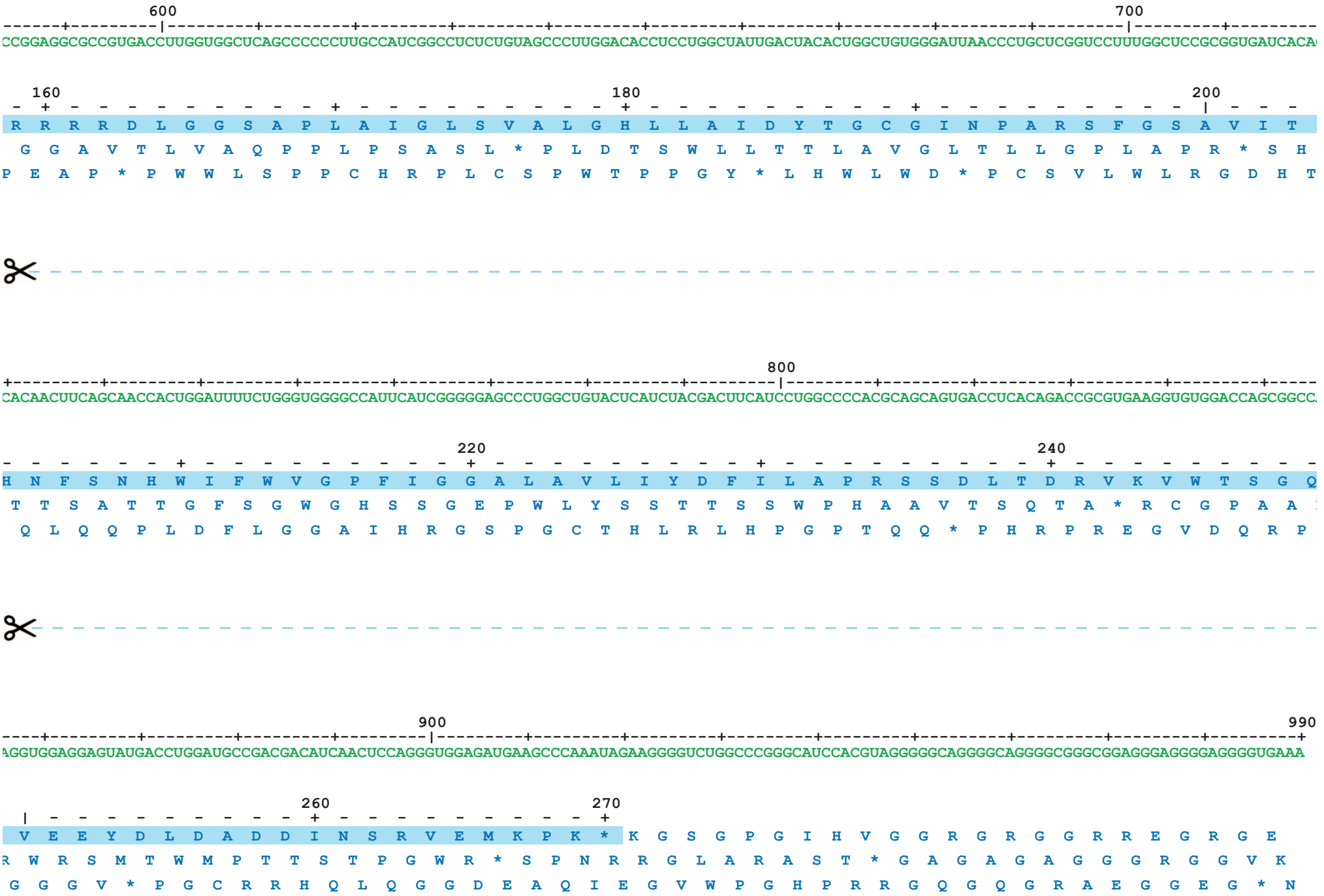
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G G G V * P G C R R H Q L Q G G D E A Q I E G V W P G H P R R G Q G Q G R A E G G E G * N